ABSTRACT OF THE DISCLOSURE

A light source estimation method of this invention estimates from the sensor response the color characteristics of an unknown light source of an image-pickup scene, in order to improve white balance adjustment and other aspects of the quality of color reproduction; a projection conversion portion 6 projects sensor response values 5 into an image distribution 9 in an evaluation space not dependent on the image-pickup light source 2 using parameters obtained by operations which can be colorimetrically approximated from spectral sensitivity characteristics of image-pickup unit 4, which are known, and from spectral characteristics of an assumed test light source 1; an evaluation portion 10 evaluates the correctness of a plurality of the test light sources 1 based on the distribution state of sample values of the projected scene; and accordingly, the correct image-pickup light source 2 is estimated.